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AUTHOR	Orkwis, Raymond
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ABSTRACT

This digest discusses the Individuals with Disabilities Education Act requirements which state that all students, regardless of their abilities, be given the opportunity to become involved with and progress in the general education curriculum. It describes how educators can use a curriculum that has been universally designed to ensure accessibility. Essential features of universal design for learning are discussed, including: (1) the curriculum provides multiple means of representation, allowing subject matter to be presented in alternative modes for students who learn best from visual or auditory information, or for those who need differing levels of complexity; (2) the curriculum provides multiple means of expression to allow students to respond with their preferred means of control; and (3) the curriculum provides multiple means of engagement that allow students' interests in learning to be matched with the mode of presentation and their preferred means of expression. The digest warns against "dumbing down" the curriculum, and urges teachers to maintain the curriculum at a sufficient level of difficulty to allow student progress. Support for a universal design curriculum is discussed, and groups who are working on universal design issues are identified. (CR)

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By

RAY ORKWIS

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ERIC/OSEP Special Project
ERIC Clearinghouse on Disabilities and Gifted Education
The Council for Exceptional Children
1920 Association Drive, Reston, VA 20191-1589
1-800-328-0272; ericec@cec.sped.org; http://ericec.org

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Curriculum Access and Universal Design for Learning

Raymond Orkwis

What is Curriculum Access?

Under the 1997 IDEA reauthorization, all students, regardless of their abilities, must be given the opportunity to become involved with and progress in the general education curriculum. Every student must have access to what is being taught. Providing access, however, involves much more than supplying every student with a textbook or a computer. Teachers must ensure that students are actively engaged in learning; that is, the subject matter is cognitively challenging them, regardless of their developmental level.

Students with disabilities can be blocked from this interaction because of an inflexible text that may inadvertently create physical, sensory, affective, or cognitive barriers. Even though they may have the same tools as everyone else, they do not truly have equal access to the curriculum. But there are several strategies educators can employ to give these students access, including using a curriculum that has been universally designed for accessibility.

What is Universal Design for Learning?

To accommodate students' individual needs and to give them the opportunity to progress in content areas, educators traditionally have adapted or altered the textbook or tests. Typical accommodations are Braille or recorded texts for visually impaired students, captioned materials for hearing-impaired students, and customized supplementary materials or alternative texts that address cognitive disabilities. In most classrooms, these accommodations are added to the standardized curriculum much as a wheelchair ramp is added to a building where stairs formerly provided the only access.

Just as after-the-fact architectural accommodations are often awkward and expensive, after-the-fact curriculum adaptations can be time consuming to design and difficult to implement in classrooms of diverse learners. A more efficient way to provide student access is to consider the range of user abilities at the design stage of the curriculum and incorporate accommodations at that point. This "built-in" access for a wide range of users, those with and without disabilities, is the underlying principle in universal design.

In terms of curriculum, universal design implies a design of instructional materials and activities that allows learning goals to be attainable by individuals with wide differences in their abilities to see, hear, speak, move, read, write, understand English, attend, organize, engage, and remember. Such a flexible, yet challenging, curriculum gives teachers the ability to provide each student access to the subject area without having to adapt the curriculum repeatedly to meet special needs.

The essential features of universal design for learning have been formulated by the Center for Applied Special Technology (CAST) into three principles:

- The curriculum provides **multiple means of representation**. Subject matter can be presented in alternate modes for students who learn best from visual or auditory information, or for those who need differing levels of complexity.
- The curriculum **provides multiple means of expression** to allow students to respond with their preferred means of control. This accommodates the differing cognitive strategies and motor-system controls of students.
- The curriculum provides **multiple means of engagement**. Students' interests in learning are matched with the mode of presentation and their preferred means of expression. Students are more motivated when they are engaged with what they are learning.

How is Universal Design for Learning Being Implemented?

Teachers who want to begin implementing universal design must begin by using curricular materials that are flexible. Although digital materials are not the only way to deliver a universally designed curriculum, they allow the greatest flexibility in presentation. They can be easily customized to accommodate a wide range of student abilities, but the teacher and the students must know how to use them. The mere presence of good software programs in the classroom does not guarantee that they will provide needed access.

The access provided by universal design for instructional materials does not mean that students are accommodated by lowering the standards, finding "the least common denominator," or otherwise "dumbing down" the curriculum. In fact, the curriculum must remain at a sufficient level of difficulty if students are to progress in it. For example, a software program for beginning readers can have different settings for the speed at which the information is presented and highlighted (multiple representations). It can be controlled with vocal commands, single switch controls, or alternate

keyboards (multiple expressions). It can request different levels of feedback from students, from having them repeat the sounds of letters and words to creating their own stories using the vocabulary words they've learned (multiple engagements). These accommodations allow the necessary flexibility for student access and the necessary challenge for learning.

Is There Support for a Universal Design Curriculum?

Many teachers are already working in environments with varying degrees of inclusiveness, effectively teaching students with and without disabilities in the same classroom. Many general and special educators now collaborate on curriculum and prepare adaptations for special needs in their classes. These teachers have already taken the first step toward implementing universal design goals in their classrooms.

As the demographics of classrooms continue to change and there is more need for adapted materials, curriculum developers, particularly those who produce instructional software, are considering the advantages of universal design. With the federal government and states pushing for schools to incorporate more technology-based teaching tools in the classroom, understanding the foundations of universal design for curriculum access can help guide teachers into implementation.

How Can I Find Out More About Universal Design for Learning?

Several groups are working on universal design issues as they relate to curriculum access:

- CAST is an educational organization that explores how technology can be used to expand opportunities for all people, including those with disabilities. Their web site contains much information about universal design for learning and accessibility, including an elaboration of the three essential curricular principles of universally designed curricula. CAST, 39 Cross Street, Suite 201, Peabody, MA 01960; 978-531-8555; cast@cast.org; http://www.cast.org.

- The ERIC/OSEP Special Project of the ERIC Clearinghouse on Disabilities and Gifted Education (ERIC EC) has published *A Curriculum Every Student Can Use: Design Principles for Student Access*, a topical brief on universal design for learning. It is available from the Clearinghouse or on the Internet at ericec.org/osep/udesign.htm. ERIC Clearinghouse on Disabilities and Gifted Education, 1920 Association Drive, Reston, VA 21091-1589, (800) 328-0272.

- *Research Connections* is a biannual review of special education research sponsored by the U.S. Department of Education's Office of Special Education Programs (OSEP) and published by ERIC EC. The Fall 1999 issue focuses on Universal Design and access to the general education curriculum. A related issue, from Fall 1998, describes research in integrating technology in the curriculum to improve opportunities for students with learning disabilities. These free publications can be requested from the Clearinghouse or found at its web site.

- The Trace Center is a research, development, and resource center that focuses on increasing access to computers and information technologies for people with disabilities. The Center's web site includes a section on "Designing a More Usable World," which employs universal design features. Trace Research & Development Center, University of Wisconsin-Madison, 5901 Research Park Boulevard, Madison, WI 53719-1252; (608) 262-6966; web@trace.wisc.edu; http://trace.wisc.edu.

- EASI (Equal Access to Software and Information) is a project of the Teaching, Learning, and Technology Group, an affiliate of the American Association for Higher Education. EASI provides information and guidance in the area of access-to-information technologies by individuals with disabilities. In conjunction with the Rochester Institute of Technology, EASI conducts online workshops on access issues. Contact EASI c/o TLT Group, PO Box 18929, Rochester, NY 14618; (716) 244-9065; EASI@TLTGROUP.ORG; http://www.rit.edu/~easi.

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